CLAIMS

1. A radio frequency device of the type with nil or quasi-nil intermediate frequency, intended to receive or send a radio frequency signal whereof the send or receive frequency is part of a frequency range subdivided into frequential channels, characterised in that it comprises on the same electronic chip (PC) frequency transposition means (MX) connected to a local main oscillator (VCOP), and in that the main oscillator (VCOP) is incorporated inside a main phase locked loop (PLL2) whereof the reference frequency is supplied by a voltage-controlled auxiliary oscillator (VCOA), itself incorporated into an auxiliary phase locked loop (PLL1) whereof the reference frequency is less than the frequency of the auxiliary oscillator, in that the reference frequency (SRFP) of the main loop is less than the output frequency of the main oscillator, greater than 10 times the frequential spacing of the channels reduced to the output frequency of the main oscillator, and removed by a whole multiple of the send or receive frequency of at least the cut-off frequency of the main loop.

2. The device as claimed in Claim 1, characterised in that the auxiliary loop (PLL1) comprises a whole divider (DV1) and in that the reference frequency of the auxiliary loop is less than or equal to, preferably equal to, the frequential spacing of the channels reduced to the reference frequency of the main loop.

3. The device as claimed in Claim 1 or 2, characterised in that the reference frequency of the main loop is greater than a twentieth of the output frequency of the main oscillator.

4. The device as claimed in Claim 1 to 3, characterised in that the range of frequencies to which the send or receive frequency belongs is in the vicinity of 900 MHz or 1800 MHz (corresponding to the GSM or DCS standard), the reference frequency of the main loop can be taken as equal to 450 MHz, whereas the reference frequency of the auxiliary loop can be equal to 50 kHz.

5. The device as claimed in any one of the preceding claims, characterised in that the electronic chip (PC) also comprises the two phase locked loops.

6. The device as claimed in Claim 5, characterised in that it is integrally produced on said electronic chip.

7. A component of a wireless communications system, characterised in that it incorporates a device as claimed in any one of Claims 1 to 6.

8. The component as claimed in Claim 7, characterised in that it forms a cellular mobile telephone.